

## CLAIMS

1. A method for scheduling an emergency procedure, comprising the steps of:

acquiring an electrocardiogram record for a particular patient;

5 determining that said particular patient has a high probability of acute coronary syndrome based on an automated analysis of data in said electrocardiogram record;

10 automatically routing a communication to a cardiologist on call, said communication comprising at least results of said automated analysis; and

in response to a predetermined message from the cardiologist, automatically scheduling an emergency procedure at an emergency coronary treatment facility.

15 2. The method as recited in claim 1, wherein said emergency coronary treatment facility is a catheterization lab.

20 3. The method as recited in claim 1, wherein said emergency procedure is percutaneous transluminal coronary angioplasty.

4. The method as recited in claim 1, wherein said automatic routing step is performed via a wireless communication channel.

25 5. The method as recited in claim 1, wherein said automatic scheduling step is performed via a network.

6. The method as recited in claim 1, wherein said automatic scheduling step comprises the steps of accessing a respective schedule for each of a plurality of emergency coronary treatment facilities and selecting an emergency

coronary treatment facility having an optimum time-to-treatment.

7. The method as recited in claim 1, wherein said automatic scheduling step comprises the steps of accessing a respective schedule for each of a plurality of emergency coronary treatment facilities and selecting an emergency coronary treatment facility which has performed a number of said emergency procedures greater than a predetermined threshold number.

8. The method as recited in claim 1, wherein said automated analysis comprises performing a serial comparison of current and previous electrocardiogram records of said particular patient to determine whether a new left bundle branch block is present.

9. The method as recited in claim 1, wherein said automated analysis comprises the steps of:

generating diagnostic statements as a function of data in an electrocardiogram record of said particular patient; and

determining whether the number of generated diagnostic statements belonging to a predetermined diagnostic classification equals at least a predetermined threshold number.

10. The method as recited in claim 9, wherein said diagnostic classification identifies diagnostic statements associated with acute coronary syndrome.

11. The method as recited in claim 1, wherein said automatic scheduling step comprises the step of automatically notifying staff members on call at said emergency coronary treatment facility regarding the scheduled procedure.

12. A system for scheduling an emergency procedure, comprising:

an instrument for acquiring an electrocardiogram record for a particular patient;

5 means for determining that said particular patient has a high probability of acute coronary syndrome based on an automated analysis of data in said electrocardiogram record;

10 means for automatically routing a communication to a cardiologist on call, said communication comprising at least results of said automated analysis;

an emergency coronary treatment facility; and

15 means for automatically scheduling an emergency procedure at said emergency coronary treatment facility in response to a predetermined message from the cardiologist.

20 13. The system as recited in claim 12, wherein said emergency coronary treatment facility is a catheterization lab.

25 14. The system as recited in claim 12, wherein said emergency procedure is percutaneous transluminal coronary angioplasty.

15. The system as recited in claim 12, wherein said automatic scheduling means comprise means for automatically notifying staff members on call at said emergency coronary treatment facility regarding the scheduled procedure.

30 16. A system for scheduling an emergency procedure, comprising:

an instrument for acquiring an electrocardiogram record for a particular patient;

an emergency coronary treatment facility; and

a computer programmed to perform the following steps:

5 determining that said particular patient has a high probability of acute coronary syndrome based on an analysis of data in said electrocardiogram record;

routing a communication to a cardiologist on call, said communication comprising at least results of said automated analysis; and

10 scheduling an emergency procedure at said emergency coronary treatment facility in response to a predetermined message from the cardiologist.

15 17. The system as recited in claim 16, wherein said emergency coronary treatment facility is a catheterization lab.

18. The system as recited in claim 16, wherein said emergency procedure is percutaneous transluminal coronary angioplasty.

20 19. The system as recited in claim 16, wherein said computer is further programmed to notify staff members on call at said emergency coronary treatment facility regarding the scheduled procedure.

25 20. The system as recited in claim 16, further comprising an electronic bidirectional wireless communication device accessible to the cardiologist.

21. The system as recited in claim 16, wherein said instrument, said computer and said emergency coronary treatment facility communicate via a network.

30 22. The system as recited in claim 16, wherein said computer is further programmed to access a respective

schedule for each of a plurality of emergency coronary treatment facilities and select an emergency coronary treatment facility having a schedule which provides an optimum time-to-treatment.

5           23. The system as recited in claim 16, further comprising a storage medium for storing records of emergency procedures performed by emergency coronary treatment facilities, wherein said computer is further programmed to access said records of emergency procedures  
10          and to reject an emergency coronary treatment facility which has not performed a number of said emergency procedures greater than a predetermined threshold number.

15           24. The system as recited in claim 16, wherein said computer is further programmed to set thresholds for use in said automated analysis in accordance with configuration instructions input via a graphical user interface.

20           25. The system as recited in claim 16, wherein said computer is programmed to perform a serial comparison of current and previous electrocardiogram records of said particular patient to determine whether a new left bundle branch block is present.

25           26. The system as recited in claim 16, wherein said computer is programmed to perform the steps of:

generating diagnostic statements as a function of data in an electrocardiogram record of said particular patient; and

determining whether the number of generated diagnostic statements belonging to a predetermined diagnostic classification equals at least a predetermined threshold number.

27. The system as recited in claim 26, wherein said diagnostic classification identifies diagnostic statements associated with acute coronary syndrome.